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COMMENTARY

TAX COMPETITIVENESS PROGRAM

The Path to Prosperity:

Internationally Competitive Rates and a Level Playing Field

The 2009 Federal-Provincial Tax Competitiveness Report

Duanjie Chen
Jack M. Mintz

In this issue...

Canadian governments took divergent approaches to tax policy in the 2009 budget season, one path leading to prosperity and the other to disappointment and diminished prospects.

THE STUDY IN BRIEF

While Canadian federal and provincial governments have made progress in reducing the tax burden on business investment in recent years, the 2009 budget season also saw more counterproductive tax policies that favour certain industries and disadvantage others. In this *Commentary*, the authors assess the implications of these trends for Canada's competitiveness as they update their annual survey of marginal effective tax rates in Canada and individual provinces.

The good news is that Canada's marginal effective tax rate on capital has fallen from 28.9 percent in 2008 to 28.0 percent in 2009. With the tax changes planned in the current and previous federal and provincial budgets for later years, the marginal effective tax rate will fall further, to 18.9 percent by 2013. If no offsetting tax changes occur abroad by 2013, these tax changes will place Canada's rate for capital investment close to the average level of marginal effective tax rates among 80 countries worldwide. In a changing world, however, it is unrealistic to assume other countries will not reform their corporate taxes.

The bad news is that the variation in marginal effective tax rates on capital across business activities has been increasing since 2006, resulting in an inefficient allocation of resources. Large and medium-size companies in certain sectors, such as communications, wholesale trade and construction, are disadvantaged by the current tax system.

Provincially, the study finds clear leaders in terms of investment climate. In 2009, the Atlantic Provinces, except for Prince Edward Island, taxed capital investment the least, followed by Quebec and Alberta. Among this group of provinces, Alberta's low marginal effective tax rate is directly associated with its low statutory income tax rate and the absence of capital and sales taxes; the other provinces achieve their apparent overall tax competitiveness by favouring slow-growth industries: manufacturing and forestry.

The highest-taxed province in 2009 is still Ontario, but this is rapidly changing. Prince Edward Island will become the highest-taxed province in 2013 at 29.2 percent, after Ontario and British Columbia implement their sales tax harmonization and Ontario reduces its corporate income tax rate to 10 percent. Manitoba will be second-highest taxed at 27.0 percent, followed by Saskatchewan at 24.9 percent. These provinces have one thing in common – an antiquated sales tax regime that applies high taxes on intermediate and capital inputs.

The study concludes with tax policy recommendations that would enhance Canada's competitiveness and stimulate economic growth and job creation as the country climbs out of recession.

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INDEPENDENT • REASONED • RELEVANT

Amid a deep global recession, federal and provincial governments faced a daunting task in setting their tax policies during the 2009 budget season. Unemployment rates were rising sharply, tax revenues were plummeting, and deficits reappearing in most provinces.

The federal government and some provinces responded with fiscal stimulus intended to buoy up demand by Canadians for goods and services. Others reacted passively or took steps to avoid large fiscal deficits.

In wake of this shift in Canada's fortunes, federal and provincial governments took two quite different paths with respect to tax policy – one a bright route leading to a pot of gold in terms of economic growth and prosperity, and the other a murky path leading to poorer competitiveness and missed opportunities.

The golden approach is exemplified by competitive corporate tax rate relief, aimed at achieving a more neutral tax system with respect to tax burdens on business activities. This approach is followed in New Brunswick's income tax reforms, Ontario's and British Columbia's planned sales tax harmonization with the federal GST and corporate rate reductions applying to all industries. Both lower rates and a more neutral tax system contribute to better growth, as taxes interfere less with business decisions on how to allocate resources to their best economic use. Also, corporate rate relief can be effective in shoring up corporate tax revenues, because multinational companies have greater incentive to shift profits to Canada, where corporate rates are below those of many trading partners, including the United States, Japan and France, and are now similar to those of the United Kingdom and Australia.[1]

The other, far less attractive approach, is for governments to pick supposedly "winning" industries, in many cases shoring up failing industries through targeted tax cuts. When tax incentives are directed at particular activities, however, resources are not put to their best use, because investment and production decisions are no longer based on economic criteria alone but also are designed to reduce tax payments. Further, when tax incentives are narrowly targeted, they are less likely to achieve their desired impact because suppliers of inflexibly produced assets, such as land and, in the short run, capital, boost their prices, thereby undermining the profitability of the industry that is intended to benefit from the tax incentive.

In other instances, such as accelerated depreciation for manufacturing and processing machinery, the tax incentives are provided on a temporary basis – and only potentially renewed at a later time – which blunts their impact from a long-run perspective. Such incentives are intended to counteract the recent economic malaise, in part by shifting investment from future years to earlier ones, but at the cost of depressing investment in later years.

The good news is that Canada's marginal effective tax rate on capital has fallen from 28.9 percent in 2008 to 28.0 percent in 2009. With the tax changes planned in the current and previous federal and provincial budgets for later years, the marginal effective tax rate will fall further, to 18.9 percent by 2013, as a result of three factors. First, the federal corporate income tax rate will fall from 19 to 15 percent by 2012, which will more than offset the expiration of the fast writeoffs for manufacturing and processing and computer assets during this time. Second, provincial corporate income tax reductions and the ultimate elimination of provincial capital tax will help reduce the marginal effective tax rate by almost 3 percentage points. Finally and quite dramatically, the sales tax harmonization to be implemented July 1, 2010 in both Ontario and British Columbia will reduce the Canada-wide marginal effective tax rate on capital by more than 5 percentage points.

We wish to thank Finn Poschmann and several members of the Tax Competitiveness Council for their helpful suggestions that improved this paper. We also wish to thank James Fleming for his superb edit.

1 It is sometimes argued that investment tax credits and accelerated depreciation as incentives for investment are less costly because they only apply to new capital expenditures. However, with income shifting, corporate rate reductions have value to governments that go beyond providing incentives for investment. See Mintz and Smart (2004) for recent estimates of income-shifting impact on the corporate tax base.

If no offsetting tax changes occur abroad by 2013, these tax changes will place Canada's rate for capital investment close to the average level of marginal effective tax rates for capital investment among 80 countries worldwide which is 17.6 percent (our latest estimate for 2008). In a changing world, however, it is unrealistic to assume other countries will not reform their corporate taxes.

The bad news is that the variation in marginal effective tax rates on capital across business activities has been increasing since 2006, resulting in an inefficient allocation of resources. Large and medium-size companies in certain sectors, such as communications, wholesale trade and construction, are disadvantaged by the current tax system. Elsewhere, tax incentives are so generous, as in the case of Atlantic forestry and manufacturing, that the marginal effective tax rate on capital is "negative," implying that businesses will over-invest in capital so long as they can write off unused deductions from profits earned on other investments. Even with the planned reductions, the dispersion in marginal effective tax rates across business activities will be worse in 2013 than in 2006, despite the sales tax harmonization in Ontario and British Columbia, corporate rate reductions, and the expiration of some targeted tax credits.

But while some governments might believe that "reverse Reaganism" could work by targeting incentives to encourage growth-oriented businesses, there is no evidence that micromanaging the corporate sector works (Harberger 1998, Jorgenson and Yun 2002). For example, manufacturing output recorded a negative annual growth rate of -0.6 percent from 2003 to 2008, while service industries grew at an annual rate of 3 percent over the same period.[2] Yet during that time, marginal effective tax rates were much lower for manufacturing than the service industries.[3] Thus, more support was given to industries facing poor prospects for growth.

Studies have shown that corporate taxes can hurt the economy most when they are not neutral among industries (Dahlby 2008). Economic distortions arising from non-neutral corporate tax policies in Canada can increase the cost of raising revenue by as much as 37 cents on each dollar of corporate tax collected (Baylor and Beausejour 2004). Further, these incentives increase compliance and administrative costs, and many have not been evaluated in terms of their effectiveness.

As for labour taxation, governments have shown little interest in reform except for New Brunswick, which plans to flatten its personal income tax system by reducing tax brackets from four to two, and by reducing rates. And while Saskatchewan increased the basic personal income tax exemption significantly in late 2008, this had little impact on the effective tax rate on labour, despite the significant revenue cost to the province. Governments should pay more attention to the personal tax system, to encourage more efficient use of labour resources in the economy.

Overall, the 2009 marginal effective tax rate on labour, including personal income, payroll and sales taxes (indicating the share of workers' earnings available for consumption), barely changes: 45.5 percent in 2008 and 45.3 percent in 2009. Despite increases at the federal level in the basic personal exemption and the bottom two personal income tax brackets, as well as provincial changes, the growth in inflation-adjusted earnings since 2008 resulted in more taxpayers jumping into higher tax brackets – known as bracket creep.

In summary, given the decline in the effective tax rate on capital in 2009, the effective tax rate on the cost of doing business, which is an aggregate of the effective tax rates on labour and capital, declines from 23.4 percent in 2008 to 22.9 percent in 2009. Canada is becoming more tax competitive with respect to the overall cost of production, but could achieve more if governments established a more neutral tax system, not just one with lower rates.

In the discussion below, we begin first with an analysis of marginal effective tax rates on capital, followed by an analysis of labour taxes and the impact of taxes on the cost of doing business. We conclude with some policy suggestions for further reforms.

2 Statistics Canada, Gross Domestic Product by Industry 15001-X, June 2009.

3 See various C. D. Howe Institute papers that we have published in the past five years.

Taxes on Capital Investment

Governments have made many changes to the taxation of capital. In the wake of a global recession, tax measures have been introduced in a variety of ways intended to encourage investment.

The federal government has taken the lead in tax reduction since 2000. Measures have included federal tax reductions in corporate tax rates: from 29.12 percent in 2000, to 18 percent this year and 15 percent by 2012, as well as the elimination of the preferential corporate rates for manufacturing – resource profits are now taxed at the same rate as other industries, owing to the replacement of the resource allowance by resource royalty deductibility. The federal capital tax has been fully eliminated for non-financial institutions. Ottawa has also encouraged provincial reductions in corporate income tax rates to 10 percent, and provided incentives for provinces to eliminate their capital taxes. This year, Ontario, which is the largest provincial economy, has announced that it will, in 2010, harmonize its sales tax with the federal GST, as well as phase-in a reduction in its general corporate income tax rate from 14 percent to 10 percent. This reduction would apply to all sectors, thereby eliminating the differential corporate rates for manufacturing and for resource industries, which are currently taxed at 12 percent. British Columbia has also announced recently its plan to harmonize its sales tax with the federal GST, effective in July 2010.

Generally, most provinces have been reducing their taxes on investment, with reductions to corporate income tax rates and the elimination of the capital tax. However, like the federal government, provinces have also been enhancing targeted incentives for capital, which will be discussed below in more detail.

As in our previous reports, we measure the marginal effective tax rate on capital for medium and large corporations in forestry, manufacturing, construction, transportation, communications, utilities, trade and business and household services. The marginal effective tax rate is calculated as the annualized value of corporate income tax, capital tax and sales tax paid on capital purchases, as a share of the gross rate of return on capital (Chen 2000).

Taking into account budgetary changes in 2009, as well as those legislated in earlier budgets to take effect by 2009, the marginal effective tax rate on capital in Canada has declined from 28.9 percent in 2008 to 28.0 percent in 2009, continuing on the path of reductions that have taken place since the beginning of this decade (see Figure 1). By 2013, the marginal effective tax rate will decline to 18.9 percent.

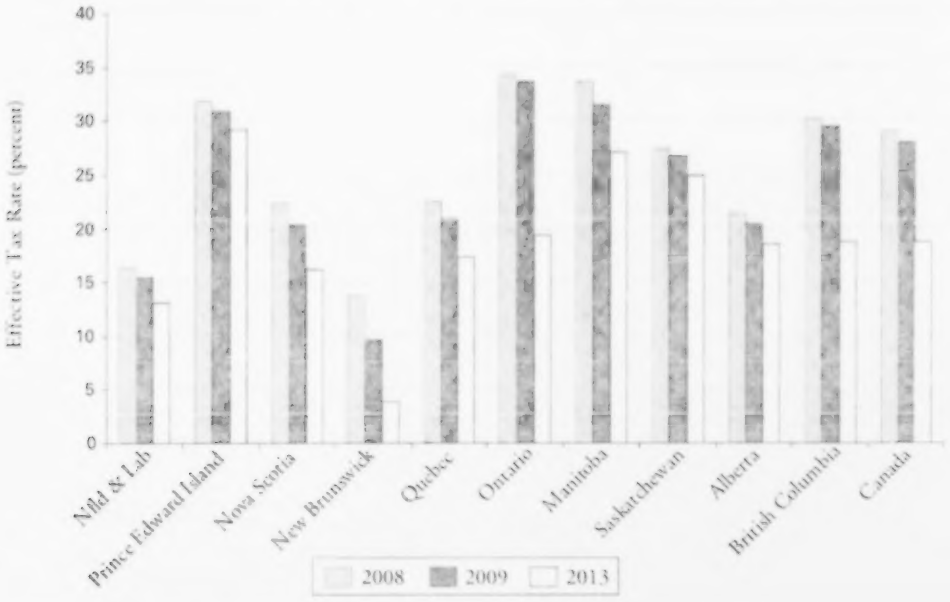
By province, the sharpest reductions by 2013 will be in Ontario, where the marginal effective tax rate on capital will fall from the highest in Canada in 2009, at 33.6 percent, to 19.4 percent. This will still be higher than the Canada-wide rate mainly due to the relative importance of the household and business services sector, which is taxed more heavily than most other industries. Once tax policies are fully implemented, Ontario will have a marginal effective tax rate for non-resource industries that is comparable to, although slightly higher than, Alberta's, which has no sales or capital taxes and a corporate rate of 10 percent. The substantial reduction in the marginal effective tax rate on capital in Ontario by 2013 is due to: 1) a combination of lower federal and Ontario corporate rates – 15 and 10 percent, respectively; 2) the phasing-out of the Ontario capital tax; and 3) sales tax harmonization,[4] with the latter accounting for almost half of the reduction.

Second to Ontario, British Columbia will also achieve a reduction of 10.7 percentage points in marginal effective tax rate on capital, of which 80 percent can be attributed to harmonizing its sales tax with the federal GST.[5]

4 Ontario will not reach full sales tax harmonization until 2018. Similar to the restricted input tax credit (ITC) system in Quebec, Ontario will impose a five-year restriction on large firms for their claim of input tax credits for certain purchases and then phase in full input tax credits over a three-year period. For details of this measure, see: http://www.fin.gov.on.ca/english/budget/ontariobudgets/2009/chpt3.html#c3_salestax

5 Similar to Ontario, the initial sales tax harmonization in British Columbia includes a temporary delay in providing full input tax credit for certain goods and services. See http://www2.news.gov.bc.ca/news_releases_2009-2013/2009PREM0017-000141.htm

Figure 1: Marginal Effective Tax Rate on Capital Investment: 2008, 2009 and 2013, Aggregate and by Province



Source: School of Public Policy, University of Calgary.

New Brunswick will have the lowest effective tax rate on capital by 2013, at 3.8 percent, as a result of three factors: a sharply lower corporate income tax rate of 8 percent planned for 2012; the elimination of the provincial capital tax; and the continuing availability of the Atlantic investment tax credit, which we assume for these calculations to be fully applied against tax liability in the year at hand.[6] This credit, however, is losing its purpose in wake of recent, better measures, such as reducing corporate income tax rates and eliminating the capital tax.

Manitoba has reduced its corporate income tax rate from 13 percent to 12 percent and will have phased out the provincial capital tax by 2011. But it has not announced any further reductions to come.

Two other provinces – Nova Scotia and Quebec – continue to reduce their capital tax rates on non-financial businesses in tiny steps toward eventual elimination. By 2013, Quebec's marginal effective tax rate on capital will fall to 17.2 percent, one point below Alberta's, mainly because of Quebec's 5 percent investment tax credit for capital assets used by manufacturing and processing businesses. Nova Scotia's marginal effective tax rate in 2013 will be even lower at 16.1 percent, but driven by the federal Atlantic Investment Tax Credit, rather than preferential provincial policy in Nova Scotia.

On the other hand, Quebec raised its corporate income tax rate by a half percentage point from 11.4 to 11.9 percent. In 2009, the Quebec marginal effective tax rate on capital, at 20.9 percent, is the fourth lowest of all the provinces but slightly above Alberta's 20.5 percent. However, this relatively low marginal effective tax rate on capital is largely attributable to Quebec's 5 percent investment tax credit for the manufacturing and processing (M&P) sector. Without this targeted tax credit, the marginal effective tax rate in Quebec would be over 24 percent.

6 In all probability, the Atlantic investment tax credit is not fully deducted from corporate taxes since a company may not be paying sufficient taxes to claim the credit. This implies that the marginal effective tax rate would be higher than computed for investments in the Atlantic and qualifying Quebec regions.

Table 1a: Marginal Effective Tax Rate on Capital Investment in Canada: 2009, by Industry and by Province

	Forestry	Utility	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transp.	Comm.	Other services	Aggregate
					Percent					
Canada	10.8	27.3	36.8	17.5	32.6	31.9	27.0	37.4	34.2	28.0
Nfld & Lab	-39.9	NA	27.4	-18.7	25.2	26.7	22.2	26.0	23.9	15.5
P.E.I.	-57.2	NA	44.5	-40.3	39.7	38.3	35.9	48.7	41.7	30.9
Nova Scotia	-20.4	26.6	31.5	-8.8	30.8	30.9	26.1	29.8	28.3	20.4
New Brunswick	-29.7	21.5	26.0	-13.8	25.2	25.4	20.5	24.3	22.7	9.6
Quebec	3.8	24.7	29.2	9.0	28.9	28.8	23.3	27.5	28.4	20.9
Ontario	20.2	31.1	42.2	22.8	37.0	36.6	32.8	44.5	39.8	33.6
Manitoba	4.9	30.3	40.5	5.1	35.9	35.4	32.8	42.9	39.9	31.4
Saskatchewan	14.2	25.4	34.5	18.7	31.3	30.6	25.6	37.3	32.0	26.7
Alberta	15.2	19.9	24.2	18.5	23.5	23.7	19.4	22.4	21.2	20.5
British Columbia	19.2	26.0	36.8	21.6	31.7	31.2	26.2	39.2	34.1	29.5

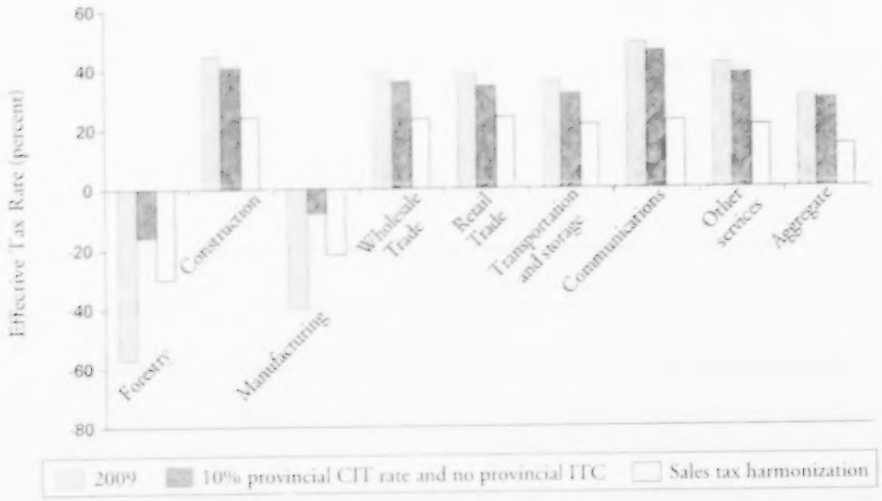
Source: School of Public Policy, University of Calgary.

Table 1a: Marginal Effective Tax Rate on Capital Investment in Canada: 2013, by Industry and by Province

	Forestry	Utility	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transp.	Comm.	Other services	Aggregate
					Percent					
Canada	10.6	17.8	22.5	15.1	22.0	21.8	18.0	21.4	22.4	18.9
Nfld & Lab	-35.4	NA	24.1	-17.0	22.2	23.5	19.2	22.9	21.5	13.1
P.E.I.	-48.0	NA	42.3	-33.3	37.5	35.7	33.4	47.1	40.1	29.2
Nova Scotia	-18.4	21.6	26.2	-8.9	25.7	25.8	21.1	24.7	23.8	16.1
New Brunswick	-30.5	15.5	19.1	-18.8	18.7	18.7	14.7	17.9	17.1	3.8
Quebec	7.0	18.5	22.5	10.7	22.5	22.4	17.0	21.2	23.2	17.2
Ontario	16.9	17.0	21.0	18.2	20.5	20.6	17.4	19.6	22.1	19.4
Manitoba	7.8	24.1	35.0	7.7	29.9	29.3	27.1	38.3	35.4	27.0
Saskatchewan	16.5	22.7	31.9	19.5	28.8	27.8	22.9	35.2	30.0	24.9
Alberta	17.3	17.0	20.9	19.1	20.4	20.5	16.4	19.6	18.7	18.5
British Columbia	16.8	17.0	20.9	18.4	20.5	20.6	16.2	19.6	21.5	18.8

Source: School of Public Policy, University of Calgary.

Figure 2: Marginal Effective Tax Rate on Capital Investment: Prince Edward Island, 2009 and Optional Changes



Source: School of Public Policy, University of Calgary.

Table 2: Policy Options for PEI, Manitoba, Saskatchewan: A METR Simulation

	P.E.I.	Manitoba	Saskatchewan
		Percent	
Current Case	30.9	31.4	26.7
Case A = no provincial ITC + 10 percent provincial CIT rate	29.7	31.6	28.1
Case B = Case A + Sales tax harmonization	14.5	20.0	20.3

Source: School of Public Policy, University of Calgary.

Possible reforms in Quebec include reducing its corporate income rate to 10 percent, and eliminating the restriction on input tax credits under the Quebec sales tax. By implementing these measures, combined with eliminating the provincial capital tax by 2011 as planned, Quebec would substantially reduce tax distortions and achieve an overall marginal effective tax rate on capital that is the same as Alberta's.

Provinces with the Best and Worst Investment Climates

In 2009, the Atlantic Provinces, except for Prince Edward Island, taxed capital investment the least, followed by Quebec and Alberta (Table 1a). Among this group of provinces, Alberta's low marginal effective tax rate is directly associated with its low statutory income tax rate and the absence of capital and sales taxes; the other provinces achieve their apparent overall tax competitiveness by favouring slow-growth industries: manufacturing and forestry.

The highest-taxed province in 2009 is still Ontario, but this is rapidly changing. Prince Edward Island will become the highest-taxed province in 2013, at 29.2 percent, after Ontario implements its sales tax harmonization and reduces its corporate income tax rate to 10 percent. Manitoba will be second-highest taxed at 27.0 percent by 2013, followed by Saskatchewan at 24.9 percent. These provinces have one thing in common – an antiquated sales tax regime that applies high taxes on intermediate and capital inputs.

To illustrate, we decomposed the marginal effective tax rates in Prince Edward Island, which best shows the effect of high tax rates with targeted incentives for capital (Figure 2). PEI currently provides the most generous investment tax credit for the forestry and manufacturing sectors, but simultaneously imposes the highest general corporate income tax rate (16 percent), along with Nova Scotia, and the highest provincial sales tax rate (10 percent), which heavily falls on intermediate and capital inputs. In 2009, PEI has the second-highest overall marginal effective tax rate among provinces, but the *lowest* marginal effective tax rate for the forestry and manufacturing sectors, which qualify for the Atlantic Investment Tax credit and provincial targeted incentives. Note that, as measured by capital stock, these two sectors account for less than 15 percent of business activity in PEI.

Such a mismatch between government tax policy and market resource allocation is obviously questionable. If Prince Edward Island eliminated its 10 percent provincial investment tax credit for the forestry and manufacturing sectors, and simultaneously lowered the provincial corporate income tax rate to 10 percent, it could cut the marginal effective tax rate for all other sectors by 3 to 4 percentage points while still continuing to favour the forestry and manufacturing sectors (as indicated by a negative marginal effective tax rate).

Furthermore, sales tax harmonization would bring down the marginal effective tax rate in PEI by almost 15 percentage points, which would benefit all industries in the province. The role of the current provincial investment tax credit is to offset the provincial sales tax levied on capital inputs for the forestry and manufacturing sectors. In other words, the current provincial sales tax "claws back" most of the tax benefit the forestry and manufacturing sectors are intended to receive under the provincial investment tax credit.

Government Tax Policies Hurt the Service Sectors Most

Despite well-planned, staged reductions in business taxation, federal and provincial governments have failed to achieve greater neutrality in the business tax structure. Little serious effort has been taken to create a more neutral tax structure, as shown below, because most governments have been using the tax system to favour particular business activities.

As pointed out in our report last year, the fast write-off for machinery and equipment used in manufacturing and processing, which Ottawa introduced in 2007 and extended to 2011 in the recent budget, narrowed the tax base; it increased inter-industry and inter-asset variation by more than 50 percent (from 15 percent in 2006 to 27 percent in 2007). In 2009, a temporary 100 percent allowance for computer assets – well in excess of economic depreciation – was also introduced to

encourage the adaptation of new technologies during times of economic stress. While less targeted than the manufacturing depreciation allowance, this allowance still erodes the tax base unduly, without having established the case that more investment in computers is critical at this particular time. The fast write-off for computer assets reduces the marginal effective tax rate by 0.6 percentage points, which is more than 60 percent of the reduction in the marginal effective tax rate on capital.

The federal and provincial governments have also introduced new or enhanced incentives for investments, several not reflected in the estimates provided in Figure 1 and tables. These include the following: labour-sponsored venture capital credits in New Brunswick and Newfoundland & Labrador; film or digital tax credits in Ontario, Manitoba, Quebec and Nova Scotia; investment tax credits in Manitoba; small business preferences in almost all provinces; small business financing in New Brunswick and Manitoba; and research and development tax credits in Alberta, the latter limited to small expenditures below $4 million.

Overall, the business tax structure is becoming more distortionary, thereby undermining productivity to the extent that resources are not put to their best economic use. As seen in Tables 1a and 1b, Canada continues to follow a traditional policy of providing greater tax relief to resource and manufacturing industries, as compared to the faster growing and increasingly trade-exposed service sectors, including utilities, communications, trade and business services. The gap in marginal effective tax rates on capital between one of the highest-taxed sectors, communications, and the lowest-taxed sector, forestry, will be 11 percentage points in 2013.

We also provide a measure of inter-industry and inter-asset distortions relative to the level of the aggregate tax burden (Table 3).[7] In 2006, the overall distortion, measured by our dispersion index, was 26.6 percent, rising to 39.1 percent in 2007 due to new tax preferences introduced at that time. It has further risen to 48.2 percent and 49.3 percent in 2008 and 2009, respectively. It is expected to decline by 2013 with corporate rate reductions, capital tax elimination, the expiration of some targeted incentives and sales tax harmonization in Ontario. However, a fall in the 2013 dispersion index is not a foregone conclusion if governments continue to introduce targeted incentives to support specific business activities.

Using targeted tax preferences is a habit that tax policymakers have difficulty kicking. For example, the accelerated manufacturing and processing capital cost allowance benefits the forestry and manufacturing industries.[8] It was introduced in 1972 and eliminated with corporate tax reform in the late 1980s. It was then re-introduced in 2007 for two years and then twice extended to future years. The allowance provides much less assistance to companies that are currently not paying taxes and it results in a substitution of machinery for other factors of production. As discussed in the introduction, such tax distortions result in lower economic performance.

Quebec has been most active in micromanaging the industrial sector through tax policy. While the Charest government curtailed a number of tax preferences several years ago, after giving up on some reforms it has recently resorted to introducing or enhancing a large number of tax incentives. These incentives range from investment tax credits to tax holidays. Corporate income tax holidays are the least effective incentive in spurring long-term investments compared to other targeted preferences – and they also cost the government a bundle of revenue.[9]

7 The dispersion index is computed as the standard deviation of inter-sectoral and inter-asset marginal effective tax rates divided by the average marginal effective tax rate. It corresponds to but is not a measure of the marginal costs of funds (efficiency cost of raising taxes). It can be shown that if the dispersion index is zero the size of distortions relative to the average tax rate is zero.

8 Our simulation shows that the single most distorting factor in our business tax structure is the investment tax credit given to manufacturing and processing assets. Eliminating this tax measure, which benefits only the forestry and manufacturing sectors, could reduce the inter-industry tax distortion by a third (Table 4).

9 See Mintz (1990) for an analysis of tax holidays popularly used in Third World countries in terms of investment and revenue impacts. We have not included tax holidays in our estimates in this report because the holidays apply to a small share of investment expenditures.

Table 3: Dispersion Index for Marginal Effective Tax Rates (METR) on Capital Investment

	2006	2007	2008	2009	2013
			Percent		
Inter-industry	15.4	25.6	32.0	32.7	24.4
Inter-asset	27.8	36.4	45.6	46.8	34.7
Overall	26.6	39.1	48.2	49.3	38.0

Source: School of Public Policy, University of Calgary.

The Quebec government has introduced an ill-designed 10-year income tax holiday for commercialization of intellectual property, which was similarly introduced last year in Ontario. There are restrictive conditions attached to such a tax holiday, which not only complicate tax administration and encourage tax planning but discriminate against other types of intellectual property commercialization mechanisms, such as a commercialization undertaken by an existing company or a commercialization dealing with intellectual property developed by "unqualified" institutions.

Quebec is not the only province to use targeted tax incentives excessively, but it has the most extensive system. Other provinces have a list of tax incentives, and as in Quebec, they are rarely tested as to whether they achieve positive economic results. Alberta has relied less on targeted incentives, but, as mentioned, has introduced a research and development tax credit that is limited to small amounts of spending. It is far from clear that the incentive will generate much research, because large and medium-size companies will find it of little value.

Taxes on Labour

Taxes directly affecting labour market conditions are those levied on personal income, employer and employee payroll, as well as sales and excise taxes. In our analysis, the marginal effective tax rate on labour income is the tax paid as a percentage of the pre-tax wage paid by employers on the last hour of work, taking into account personal income, payroll and sales taxes that reduce employment income received by the worker (see Mintz 2001 for an explanation).

This tax measure emphasizes the impact of taxes on the decision to work extra hours rather than the decision to join the workforce (which depends on the value of after-tax income from a job as opposed to staying at home). Empirical studies on labour taxes focus on both the incentive to work extra hours and participation in the labour force. Taxes discourage people from working by substituting untaxed leisure for money income to buy goods and services. On the other hand, taxes may encourage people to work more to make up for lost income. With respect to incentive effects, studies suggest that taxes have a relatively small impact on labour supply from primary workers but a larger and significant effect on secondary workers (Mintz 2001 and Dahlby 2008 for a review of recent studies).

Taxes can also affect employment decisions to the extent that workers bargain for higher wages to make up for lost income in the presence of taxation. Studies have suggested that 20 to 30 percent of labour taxes are shifted forward (see Mintz 2001). Differential taxes across industries would be shifted more strongly forward since workers can shift more easily between industries to avoid the tax.

Taxes also affect inter-provincial, and to a much more limited extent, international migratory decisions. The decision for someone to move from one jurisdiction to another depends on a comparison of taxes paid on total income earned (the average tax rate) as well as the lifestyle amenities available in each jurisdiction.[10] Our measure of the marginal effective tax rate is not relevant to the migration decision for this reason. However, to the extent that the tax system is progressive (higher average and marginal tax rates on upper income households compared to low income households), labour migration would be affected. All else being the same, a province with a more progressive tax will encourage lower-income workers to migrate to it and high-income workers to move to other provinces. Provincial policies that redistribute income through more progressive tax structures can therefore be undone by migration since the individuals receive the same after-tax income across all provinces – migration causes skilled wage levels to rise and unskilled wages to fall in a province with a more progressive income compared to other provinces. In Canada, inter-provincial migration is sensitive to taxes and subsidies but much less so with respect to the francophone population, which has a strong attachment to Quebec (Day 1992).

The single most important federal budgetary change in 2009, with respect to the marginal effective tax rate on labour income, is the 7.5 percent rise in the basic personal amount and the bottom two personal income tax brackets. Considering the national average inflation-adjusted growth rate for 2008 earnings was below 3 percent, this federal tax change will reduce the tax burden for most taxpayers.

The Labour-Tax Burden by Province

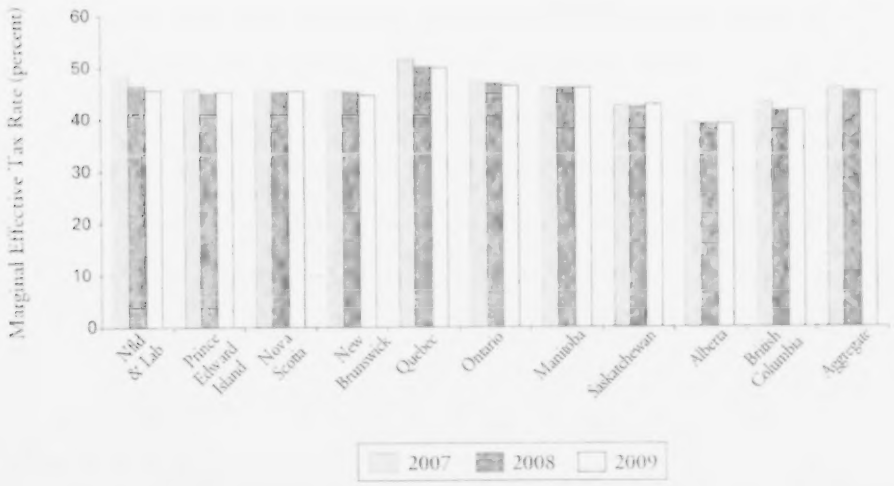
At the provincial level, both New Brunswick and Newfoundland & Labrador have reduced their personal income tax rates, in addition to indexing income for inflation (Figure 3a). In Newfoundland & Labrador, the 1 percentage point tax reduction that took effect in the second half of 2008 will have its full impact in 2009. In New Brunswick, tax relief and restructuring is just beginning. Tax-rate reductions in New Brunswick will continue until 2012 when the province attains a two-tier personal income tax regime with low rates (9 and 12 percent). This tax structure will be second only to Alberta in terms of both simplicity and efficiency. To compete with Alberta, Saskatchewan, in the fall of 2008, introduced a much higher personal exemption rate, raising it to $13,269 for a single person for 2009, and double that amount for a couple.

Unfortunately, other provinces have made few broad tax reductions for labour earnings. In fact, several provinces have indexed their personal income tax brackets at a rate lower than the growth rate in nominal earnings. As a result, the marginal effective tax rate on labour arising from provincial income taxation may slightly rise and even outweigh the tax benefit arising from the federal increase in personal income tax brackets. This is the case for British Columbia, with 2 percent indexation versus 2.7 percent actual earnings growth, and Saskatchewan, with 2.5 percent versus 4.6 percent, respectively, for 2009.

Overall, labour income is least taxed in Alberta because of its single 10 percent personal income tax rate, combined with a generous basic allowance ($16,775) that applies in claiming the non-refundable tax credit. After Alberta, the next lowest-taxed provinces are British Columbia, Saskatchewan and New Brunswick. On the other end of the spectrum, Quebec is the highest-taxed province for labour, followed by Ontario, Manitoba and the remaining three Atlantic provinces.

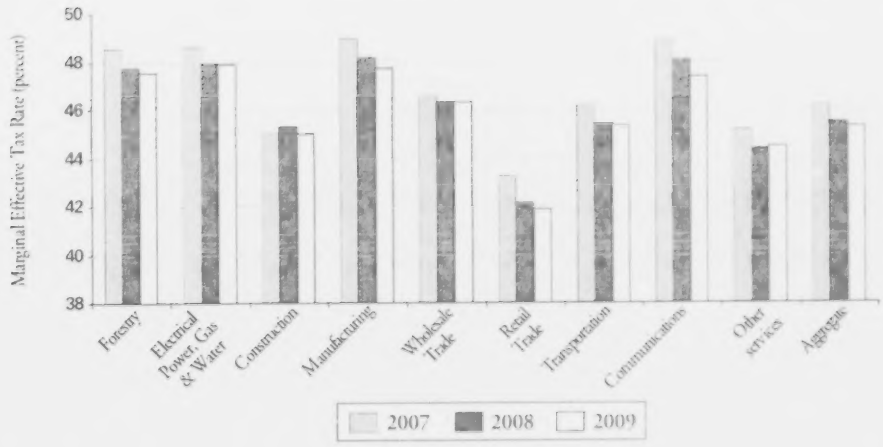
10 Similarly, provincial labour taxes can be shifted forward more strongly if workers are willing to move across provinces to avoid paying higher taxes in one region compared to another.

Figure 3a: Marginal Effective Tax Rate on Labour by Province: A Comparison between 2007, 2008 and 2009



Source: School of Public Policy, University of Calgary.

Figure 3b: Marginal Effective Tax Rate on Labour by Industry: A Comparison between 2007, 2008 and 2009



Source: School of Public Policy, University of Calgary.

The Labour Tax Burden by Industry

Because we measure the tax burden on labour by the marginal effective tax rate, a cross-industry comparison is affected by industrial variation in labour income. For example, the lowest tax burdens on labour appear to be in the sectors with average earnings well below the national level, such as retail trade and the other services sector. The exception is the construction sector in which earning levels are above the national average, while the tax burden on labour is the third lowest of all industries. This is because the largest provincial activity in the construction sector in recent years has been in Alberta (39 percent) where the marginal effective tax rate on labour is the lowest of all provinces. The tax advantage for the construction sector would be reduced if the construction sector in Alberta shrank compared to that in other provinces.

As another important point, payroll taxes (net of associated benefits) vary across industries (and provinces) because of Employment Insurance. As reflected in our calculations, the forest and construction industries benefit most, in that benefits claimed are well in excess of contributions to the program. Some service sectors, such as communications, transportation and utilities, are disadvantaged by the Employment Insurance program since benefits claimed are well below contributions made by employers and employees.

Burdens and the Cost of Doing Business

Companies use capital and labour as inputs to do business. Taxes on labour and capital are therefore taxes on the cost of doing business. We estimate, by industry, marginal effective tax rates on the costs of doing business by aggregating the individual effective tax rates on capital and labour according to the relative shares of capital and labour in the sector's value-added. Taxes on capital are assumed to fully increase costs, because in an open economy businesses cannot shift the burden of taxes by reducing the cost of capital. With respect to labour, taxes increase business costs to the extent that such taxes are shifted forward in the form of higher wages – the portion shifted forward is assumed to be 30 percent.[11]

The tax burden on the cost of doing business in Canada fell from 23.4 percent in 2008 to 22.9 percent in 2009 (Figures 4a and 4b). This largely reflects the reduction in the effective tax rate on capital somewhat offset by higher consumption taxes in some provinces. With planned reductions in corporate taxes and sales tax harmonization, the tax on the cost of doing business will decline most in Ontario and British Columbia in the future.

Moving from Divergence to Convergence

The current-year budgetary tax changes reflect an eye-popping divergence in approach to tax policy among provinces: New Brunswick is pursuing broad structural reforms to its personal and business tax structures to improve simplicity and efficiency. Ontario and British Columbia will adopt a more efficient and fair sales tax structure by harmonizing their individual sales tax regimes with the federal GST. Ontario will also eliminate its dual corporate income tax rate for large companies (12 for manufacturing and resource income and 14 percent for other companies) to a single rate of 10 percent.

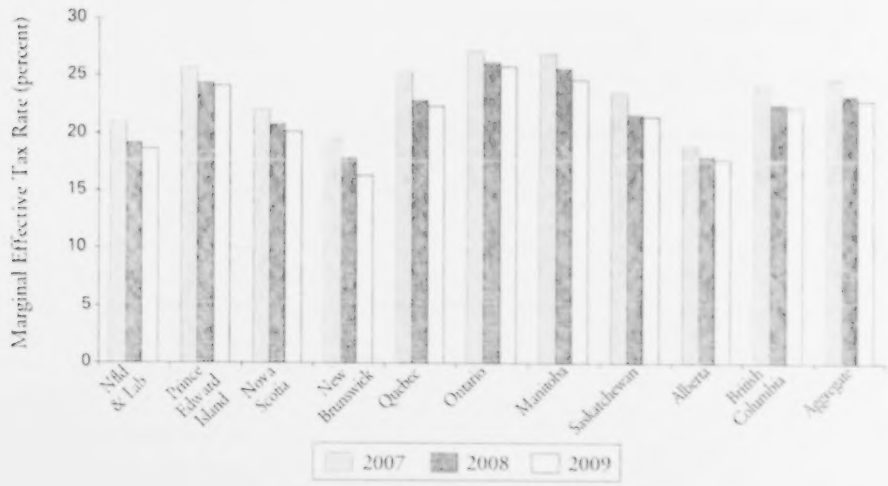
On the other end of the spectrum, several provinces have failed to improve their tax structures. Prince Edward Island retains the most outdated structure, with high tax rates on corporate income and retail sales. Quebec, while moving to abolish its capital tax, is raising its corporation income tax rate from 11.4 to 11.9 percent rather than moving to a more neutral tax base by reducing its complex regime of targeted incentives.

Below, we provide some policy simulations that are intended to demonstrate that provincial convergence to a 10 percent corporate rate, elimination of many targeted incentives and the replacement of the retail sales tax with a GST-like provincial sales tax would not only improve competitiveness in reducing the aggregate effective marginal tax rate but would reduce distortions in the tax system.

Canada's marginal effective tax rate profile by 2013, based on legislated intentions of governments, will be 18.9 percent on capital, 45.6 percent on labour and 19.7 percent on the cost of doing business (Table 4). This, no doubt, will be a major

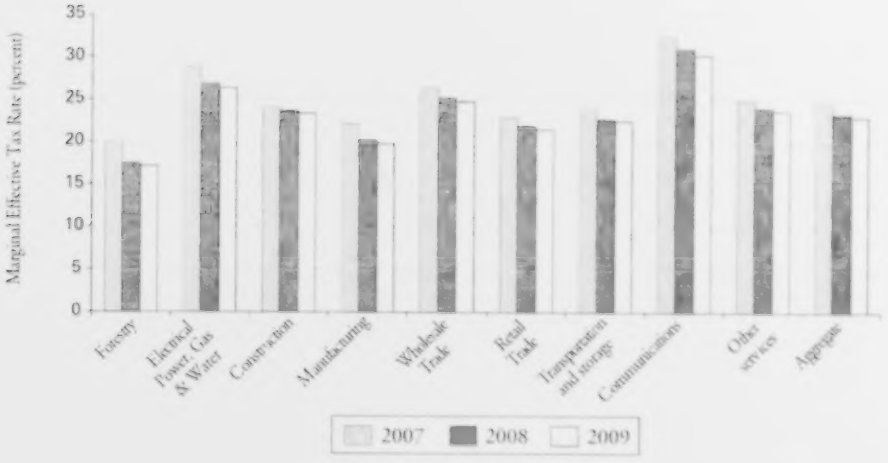
11 One could argue that differential tax rates across provinces might be shifted forward to businesses more strongly than 30 percent as modeled here due to labour mobility. However, we do not know the degree to which mobility affects forward shifting of marginal effective tax rate inter-provincial differentials.

Figure 4a: Marginal Effective Tax Rate on Cost by Province: A Comparison between 2007, 2008 and 2009



Source: School of Public Policy, University of Calgary.

Figure 4b: Marginal Effective Tax Rate on Cost by Industry: A Comparison between 2007, 2008 and 2009



Source: School of Public Policy, University of Calgary.

achievement and will put Canada close to the average tax burden on capital among 80 countries (See Chen & Mintz, 2008b). However, we can do even better, particularly in improving tax neutrality. Suitable reforms would include the following:

- Three provinces, Manitoba, Prince Edward Island and Saskatchewan) continue relying on a distortive retail sales tax that harms businesses' competitiveness. Adopting a sales tax harmonized with the federal GST would largely eliminate taxes on intermediate and capital goods, improve business competitiveness and reduce variability in effective sales tax on consumer products.
- To improve efficiency and simplicity, federal and provincial governments could eliminate targeted tax incentives and thereby broaden the tax base.
- Provinces could reduce corporate income tax rates to 10 percent. Federal rate reductions would be more affordable with the elimination of preferences, perhaps allowing for a further rate cut below 15 percent.

The combined result of the above changes to business taxation would be to reduce our current projection for the 2013 marginal effective tax rate on capital by another half percentage point, and reduce the inter-industry and inter-assed tax distortions by more than 50 percent.

Finally, differential tax rates across industries should also be reduced with respect to the taxation of labour. For example, payroll taxes and benefits associated with employment insurance, in particular, vary across industries.

Similar to New Brunswick, provinces could consider flattening their tax schedules at the personal level. As discussed above, provincial attempts to redistribute income can be undone by labour migration. A province that increases the rate progressivity in its tax structure loses high income taxpayers to other provinces, while attracting low-income taxpayers from other regions. Skilled wages increase and unskilled wages are depressed as a result, countering the attempt to redistribute income from the rich to the poor. Redistributive tax policies would be more effective at the federal level.

As an example, if provinces adopted a flat 10 percent personal income tax rate, the marginal effective tax rate on labour would fall from 45 percent to below 42 percent. Implementing all of the tax changes proposed above would reduce the marginal effective tax rate on costs from 19.5 percent to 18.0 percent.

Conclusions

In recent years, federal and provincial governments have done an admirable job in reducing corporate tax rates. The reductions not only increase corporate investment but also help governments counteract income-shifting that erodes their tax base as multinational companies shift profits from high- to low-tax regions of the world.

Disappointingly, however, there has been a lack of focus on improving the neutrality of the tax system. Effective tax rates have increasingly varied across sectors, especially hurting most service industries, which are the strongest source of jobs in Canada. They are also becoming more exposed to international trade and therefore external competition.

Cutting rates is not good enough to improve productivity. Neutrality is also important. Governments should make a greater attempt to avoid using targeted preferences and remove distortions that impede productivity. We believe that both the federal and provincial governments should reduce their reliance on targeted incentives that distort economic decision-making and increase administrative and compliance cost burdens. Provincially, Manitoba, Prince Edward Island and Saskatchewan should reform their sales tax systems along the lines recently pursued by Ontario and British Columbia. Provincial corporate rates should be reduced to 10 percent, with differential rates on profits across industries removed entirely. Further, variations in effective tax rates on labour across industries and provinces should also be curtailed.

Such reforms hold the promise of stimulating business investment across all sectors and creating fresh employment as Canada climbs out of its recent recession.

Table 4: Policy Simulations for 2013

	METR	METR dispersion index
	Percent	
A. Marginal Effective Tax Rate (METR) On Capital		
2006	36.2	15.4
2007	31.6	25.6
2008	28.9	32.0
2009	28.0	32.7[a]
Tax Changes by 2013: Announced		
Federal corporation income tax reduction by 4 points	25.2	34.8[a]
Federal ending the fast write-off for M&P and computer	26.6	23.6
Provincial corporate rate reduction and capital tax elimination	24.1	23.5[a]
Sales tax harmonization in Ontario and BC	18.9	24.4[a]
Tax changes by 2013: Assumed		
Case A: Nationwide sales tax harmonization[b]	17.4	25.1[a]
Case B = A + Elimination of all investment tax credits	18.9	11.7
Case C = B + A + 10 percent corporate rate in all provinces	18.4	11.7
B. METR on Labour		
The current projection for 2013	45.6	
Case D: 10 percent flat provincial PIT rate	41.9	
C. METR on Costs		
The current projection for 2013	19.5	
Case E = Case C + Case D	18.0	

[a] The increase in the METR dispersion index is primarily attributable to the lower average METR, rather than the standard deviation, which changed little in these cases.
[b] This simulation also implies no restriction on input tax credits, which is embedded in Quebec's sales tax, legislated for the first five years in Ontario's sales tax harmonization, and planned for the initial sales tax harmonization in British Columbia.
Source: School of Public Policy, University of Calgary.

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September 2008	Chen, Duanjie and Jack M. Mintz. "Still a Wallflower: The 2008 Report on Canada's International Tax Competitiveness." C.D. Howe Institute e-brief.
September 2008	Dungan, Peter, Jack Mintz, Finn Poschmann, Thomas Wilson. *Growth-Oriented Sales Tax Reform for Ontario: Replacing the Retail Sales Tax with a 7.5 Percent Value-Added Tax.* C.D. Howe Institute Commentary 273.
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